

Organizational Change

Processes and Levels

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Abstract

Change is a multifaceted affair that happens over time and is best understood as a process that takes place within contexts: the 'outer' context of change is the social, economic and political environment outside the organization, and the 'inner' context consists of dimensions within the organization, like culture(s), politics, and structure. Consideration of multiple levels – individuals, groups and organizations – is required when researching the outer and inner contexts of change. A longitudinal, multi-level qualitative study of a planned change initiative was made at PCo, the Canadian subsidiary of a European pharmaceutical company, which involved the introduction of a new organizational structure. The paper explores the relationship between individual, group and organizational change processes as they evolved in relation to this new structure. The research shows that change processes at different levels are interlinked, and reveals how change phenomena at one level affect phenomena at other levels. The paper provides an analysis of how actual outcomes of the change turned out to be unintended and unwanted. It demonstrates that the multi-level, processual-contextual approach to change can provide helpful insights into change processes.

Introduction

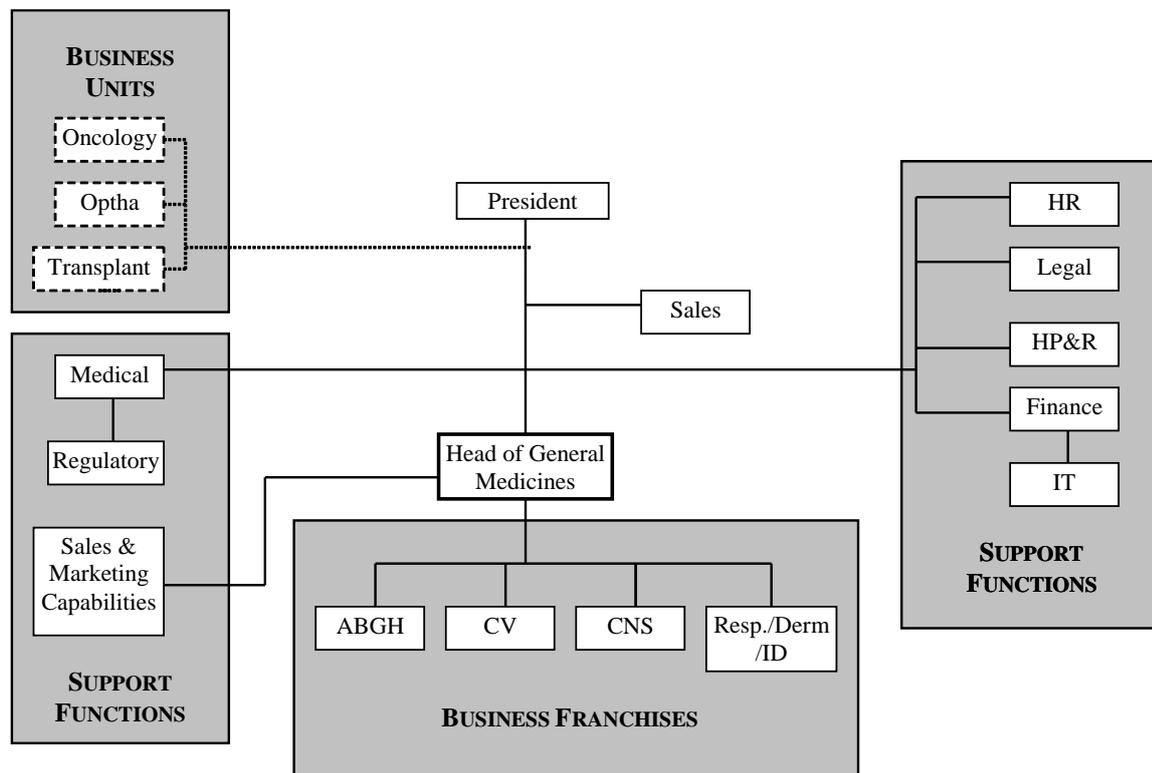
A pile of all the documents produced during the last fifty years by people directly involved in organizational change might almost be dwarfed by a pile of all the literature which has been produced about organizational change. Recent research on change has more modest goals than producing generic recipes for change (which rarely lead to successful change), and there has been a trend towards research which takes account of the situated nature of organizational action. The present study follows this trend and is intended to increase our understanding of the paths of change within an organization.

We followed an organizational change at the Montreal-based subsidiary of a large multinational pharmaceutical company; we refer to the company as PCo. There were over seven hundred employees at PCo in Montreal, all of whom are knowledge workers, as there is no manufacturing unit in Canada. The main commercial activities that are performed in this location are marketing new and existing pharmaceutical products, conducting clinical trials for new drugs, and getting and maintaining approval for drugs from Health Canada. Some of the drugs are for general practitioners and some are for specialists.

The change initiative – known as the *Bauplan* change – that forms the starting point of this research involves a planned change in the organizational structure. The company's global headquarters decided on this change, whose goal was to align the structures of the company's main subsidiaries. There were two main aspects to this structural change: a) a matrix structure, which breaks up existing groups and creates a Business Franchise structure; and b) the introduction of a new position within the organization which is equivalent to Chief Operating Officer. These changes took place sequentially, not simultaneously.

The pre-*Bauplan* structure at PCo Canada was organized by four functional areas (brand marketing, marketing excellence, clinical and regulatory), rather than by product lines. Each of the functional areas was headed by a VP who reported to the President. Phase I of the *Bauplan* change created four Business Franchises for the Primary Care drug portfolio, which was achieved by breaking up the existing Brand Marketing team. The Business Franchises were based on therapeutic area. The main point of Phase 2 of *Bauplan* was the creation of the position of Head of General Medicines, who was supposed to take over some of the work of the President, and also to improve co-ordination and communication between the business units. This new structure is shown in Figure 1¹.

Figure I: PCo structure after Phase II of *Bauplan*



Legend: Figure 1 shows the new organizational structure

One of PCo's senior managers summarised *Bauplan* as follows:

“Bauplan is actually the Business Franchise structure, and then a head or chief operating officer type of position.”

In other words, *Bauplan* consists of the change to a matrix structure (Phase 1), and the creation of the position of Head of General Medicines (Phase 2). The second of these changes took place approximately one year after the first.

We used a longitudinal, multi-level qualitative approach to study this planned change initiative. In this paper we explore how the change initiative developed over time and the relationship between individual, group and organizational change processes. We took a processual-contextual approach to study this change; the next section describes this method.

¹ The business units are self-contained businesses. Support functions: Sales and Marketing Capabilities provide market research; Medical and Regulatory deal with approval for drugs. The business franchises are responsible for marketing drugs for a specific therapeutic area: Arthritis, Gastrointestinal, Bone, Hormone Replacement; Cardiovascular; Central Nervous System; Respiratory, Dermatology and Infectious Diseases. The role of Head of General Medicines is essentially that of a COO.

Studying Change

Burrell and Morgan's [1] paradigms are helpful in categorizing the literature on change. First, there is a conceptualization that comes from the functionalist and structuralist paradigms. This conceptualization emphasises that change is "an empirical observation of difference in form, quality, or state over time in an organizational entity" [2]. This approach freezes an entity at two specific moments and compares the organization at time 1 to the organization at time 2. There is an assumption that an organization is a concrete object that can be measured and studied using rational scientific methods.

The radical humanist and radical structuralist paradigms are more concerned with process. A typical understanding of change in these paradigms is that of Francis and Sinclair [3], who describe organizational change "as an ongoing process of social construction that comprises spiral patterns of discursive change and restructuring of collective meanings". Non-functionalists also emphasise that organization itself is a process, and that organizations are built on social processes. Such an understanding lies at the heart of the processual-contextual approach to the study of organisational change. Pettigrew [4, 5, 6, 7] criticises most studies of organizational change as ahistorical, acontextual and aprocessual. To remedy these deficiencies, he proposes [4] an analysis that deals with four interconnected issues:

- multiple contexts and levels of analysis,
- description of the processes under study,
- a theory (or theories) of change, and
- a way of linking contextual (vertical) variables with the processes that are being studied (horizontal variables).

Pettigrew differentiates between inner context and outer context. He understands the external context as being wider in scope than the business environment of the organization – context is provided by the social, political, cultural and economic aspects of society. Examples of inner (vertical) contextual factors are such features as an organization's culture, structure and political environments within which and through which the change would proceed. Pettigrew emphasises the influence of internal politics and conflicts on the direction and outcomes of change.

The very nature of processual-contextual research is that it deals with several levels. The axiom that organizations are multilevel systems is implicit in organization theory, and provides a foundation for historical and contemporary theories of organizational behaviour [8]. This axiom is typically unacknowledged, however, and little research deals explicitly with levels [9], even though no construct is level-free and organizational phenomena inevitably involve levels [10]. As Rousseau [11] contends, "conceptually, if not always operationally, organizational research is inherently cross-level". However, organization theory has generally dealt with each level in isolation, because the intellectual forebears of organizational research – psychology (micro-level) and sociology (macro-level) – still exert a profound influence on scholars [8, 10]. That this is not ideal can be seen in the arguments of Rousseau [10], Cappelli and Sherer [12], Klein et al. [10] and House et al. [13] that single level perspectives cannot adequately account for organizational behaviour. The fundamental argument for multilevel research is that the study of behaviour in and of organizations necessarily means studying such behaviour in context, where context refers to "both the setting in which individuals, groups, or organizations operate as well as to their constitutive parts" [13: 226]. Such research involves integrating the individual-based explanations of micro research with environment-based explanations, and results in a "deeper, richer portrait

of organizational life” [10]. Multilevel research is a particularly rigorous way of examining the impact of context [14].

Multilevel research is particularly relevant for studies of organizational change, because as House et al. [13] point out, organizational change is linked to individual change, but these are not the same phenomenon. Organizational change processes by their very nature affect groups and individuals, who must go through their own change processes [15]. Yet while much of the literature on organizational change does deal with different levels, it does so only implicitly. Explicitly multilevel research into aspects of organizational change is still not widespread. Our research addresses this issue.

The researcher who intends to bring together micro- and macro-level analyses needs to consider ways of reaching this challenging goal. First, it is important to understand what levels are. Rousseau [11] points out that there are levels of measurement, analysis and theory. The data are attached directly to the level of measurement; for example, the number of people in a group is measured at the group level, while individuals' data are measured at the individual level. The level of analysis is the unit to which the data are assigned for hypothesis testing, so if individual data are aggregated to the group level, the level of analysis is the group. The level of reference or focal unit is the level to which generalisations are made, being the target that the researcher aims to depict and explain; Klein et al. [10] refer to this as the level of theory. Rousseau [11] and House et al. [13] make the essential differentiation between 'levels' and 'hierarchy': hierarchical levels and levels of analysis are not synonymous.

There can be an assumption of hierarchy in multilevel analysis, which tends to assume that individuals are influenced solely by the characteristics of the formal hierarchy of the organization, and that higher-level units affect all individuals in the same way [16]. Behaviours of lower levels may not, however, necessarily be dependent on what transpires at higher levels, because other contextual factors may play a role. The social nature of organizations means that not all social entities are recognised in the organization chart [8], such as the groups outside the organization of which individuals are members [11].

Drazin et al. [16] make the observation that “an individual occupies multiple organizational roles and is influenced by membership in all of them”. The implication for multilevel research is that effects cannot be attributed to membership in a single hierarchical group. Instead the researcher must take into account that an individual is subject to multiple – sometimes contradictory – influences. It is precisely at this point that the idea of considering context when investigating organizational change becomes valuable, because it allows for the existence of a world outside the organization and its formal organization charts. The levels of reference of single-level analysis can be individuals, dyads, groups, organizations, industries and so on [e.g. 8, 11, 17]. The aim of multilevel research is to reflect the multilevel nature of organizations. The next section describes how we approached this task.

The *Bauplan* Change

Here we first describe our methodology. We gathered a large amount of data – over fifty interviews – not least because the change we were studying was a particularly complex one. For this reason, we have chosen in this paper to concentrate on one particular aspect of the change that we use to demonstrate the advantages of the processual-contextual multi-level approach.

Methodology

There were two aspects to the data collection strategy. First, in order to permit the analysis of change processes over time, first-hand accounts of change in the company were gathered from individual interviews (and company documents) over a period. Second, in

order to be able to analyse categories that emerged (involving individual, group and organization levels), the selection of interviewees took into account hierarchical, functional and informal groupings within the organization.

Primary data gathering had two phases, relating to the phases of the Bauplan change itself. In the first phase (Round 1), qualitative data were gathered through interviews. In the second phase (Round 2), both qualitative and quantitative data were collected. The research involved the following steps:

- Initial meetings with key informants to enable the construction of the first interview script and to identify interviewees.
- Round I of primary data collection (i.e. first round of interviews). These took place after Phase I of the Bauplan change.
- Collection of documentary data from PCo.
- Further analysis of interview and documentary data
- Round II of primary data collection. This took place around one year later, and after Phase II of the Bauplan change.
 - Qualitative interview data were collected from a subset of individuals who participated in the Round I interview as well as a number of new respondents. The data collection continued until theoretical saturation had been reached.
 - Quantitative survey data.
- Further analysis of data and theory building.

The methodology used to guide data selection and theory building was grounded theory. Originally espoused by Glaser and Strauss [18], grounded theory gives priority to the data over theoretical assumptions. At the heart of the data collection procedure in this research lies the notion of theoretical sampling. Theoretical sampling selects cases based on content, not abstract methodological criteria: it needs to be worked out carefully rather than letting it occur haphazardly [19]. We then coded the data based on their recommendations.

The *Bauplan* Change: Processes and Levels

Change outcomes can be categorized in terms of their intentionality, the extent to which the desired outcome was achieved and the level where change outcome is observed. The concept change outcome has several dimensions. First, the intentionality of the change outcome – these are intended/unintended outcomes. The unpredictable nature of change processes means that there will be outcomes which were not expected or intended. Second, when a change outcome is classified as ‘intended’, its intended results may be achieved fully, or not achieved at all. A third aspect of the concept ‘change outcome’ relates to the level where the change has an effect. A planned change initiative could be introduced which is intended to have a specific effect at the level of the organization, group or individual.

The intended outcomes of the Bauplan change were communicated to PCo employees by means of change management activities by PCo senior management and are summarised in Table I:

Table I: Expected outcomes of Bauplan classified by level

	Intended Outcome
Organization level outcomes	More alignment with PCo Pharma globally
	Greater financial success
	More focus on the business
	Improved decision making
Group level outcomes	Increased alignment and synergies
	More efficiency between Primary Care and Support Functions
Individual level outcomes	More job accountability and responsibility
	Career progression

Legend: Table 1 lists the intended outcomes of the *Bauplan* change grouped by level

In this paper we look at one outcome, "more focus on business" and, by linking change process to change outcomes at different levels, explore the extent to which this outcome was achieved. This outcome was specifically mentioned in internal documents; our analysis of the interview data shows that it was understood as meaning more external focus and less internal focus on non-business affairs.

Organization level outcome

Here, we consider the outcome "more focus on the business". We asked respondents to compare the present situation to before *Bauplan* and to tell us whether or not they felt there was more or less focus on the business than before, or if there was no change. The results from our interviews are summarised in Table II below.

Table II: Organization level outcome – Round 1 and 2 interviews

Outcome		Round 1 interviews		Round 2 interviews	
		N=32		N=29	
More focus on the business	Progress	6	19%	4	14%
	Status quo	18	56%	22	76%
	Lost ground	8	25%	3	16%

Legend: Table II shows opinions relating to the planned outcome "more focus on the business"

During the interviews, two aspects to achieving this goal emerged. For respondents, focus on the business meant increasing external focus by getting closer to customers, and decreasing internal focus by reducing the amount of time, effort and energy spent on activities that were not directly related to the business.

The data in Table II indicate that 56% of the interviewees, when asked about one year after the implementation of the matrix structure, thought that there was essentially the same degree of focus on the business as before *Bauplan*. This did not mean that they were satisfied with the degree of focus, however, as indicated by the following comment:

"Now, just as we have as long as I've been here, we spend too much time on what's happening inside, not outside." – Associate, Support Function.

The second round of interviews took place around one year later, after the position of Head of General Medicines had been created. When asked about focus on the business, the majority of respondents (22 of 29) stated that they had not noticed either an increase in

external focus, or less time and effort being spent on internal, non-business related topics specifically because of *Bauplan* over the previous year. Generally, the interviewees were saying that there was no change, but that did not mean that the degree of focus on the business was acceptable. The following two quotations demonstrate this point of view:

“I haven’t seen any change there at all. We still are involved in a huge number of navel-gazing activities.” – Middle manager, Support Function.

“More external focus? Not really – we talk about it, but nothing seems to be happening.” – Associate, Business Franchise.

However, we get a more differentiated view when we take account of one type of group – hierarchy. The data in Table III show a difference between staff members (associates, managers and directors) and senior management (VPs and above) in terms of whether there was more focus on the business.

Table III: Hierarchical groups and organization level outcome – Round 1 and 2 interviews

	Round 1 interviews				Round 2 interviews			
	Staff Members		Senior Managers		Staff Members		Senior Managers	
	N=25		N=7		N=23		N=6	
Progress	4	16%	2	29%	2	9%	2	33%
Status quo	14	56%	4	57%	18	78%	4	67%
Lost ground	7	28%	1	14%	3	13%	0	0%

Legend: Table III shows opinions relating to the planned outcome “more focus on the business” grouped by position in the hierarchy

The next level to be considered is that of the individual. It emerged from the interviews that just over fifty percent of the interviewees felt that their stress level had increased with the introduction of *Bauplan* (see Table IV).

Table IV: Individual level outcome: Stress – Round 1 interviews

	N=34	
More	19	56%
Same degree	15	44%
Less	0	0%

Legend: Table IV shows opinions relating to the unintended “stress”

There were four main themes to their comments about this topic. First, the introduction of a new structure and the resultant uncertainty was a contributing factor, being mentioned by twelve of the interviewees. Second, the nature of the new structure itself, which was being perceived as top heavy. Interviewees drew attention mainly to the workload, e.g.

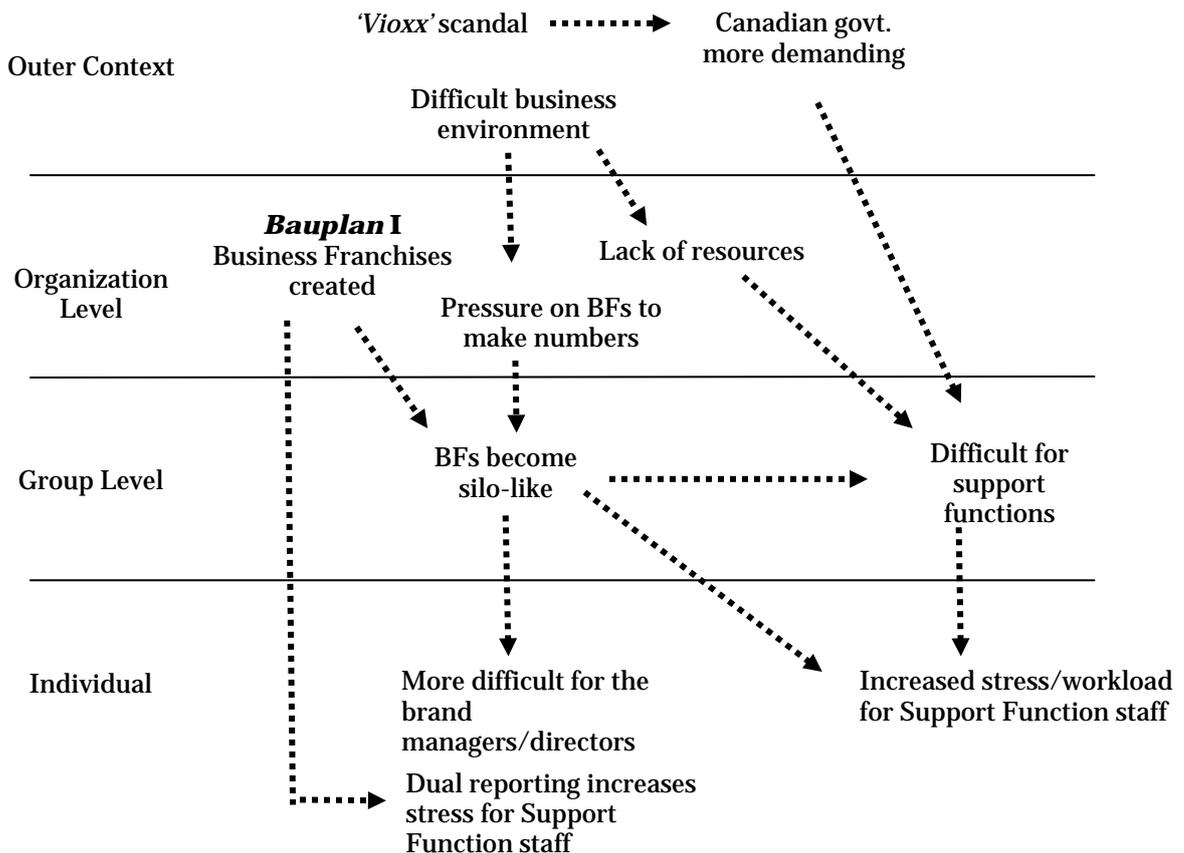
“So we are becoming very heavy at the top and leaner at the bottom, so the pyramid is turning upside down. Which increases stress and pressure – you know, too many bosses, too many chiefs, not enough Indians.” – Middle manager, Support Function.

A third reason that was mentioned particularly by staff in the Support Functions was related to the way they worked with the Business Franchises. Support Function staff still had

to deal with, and be evaluated by, two different managers, even after the dual solid line system had been abolished. In addition, the fact that each Business Franchise had different ways of working was mentioned by several Support Function interviewees as a source of stress.

It is at this point that a processual-contextual, multi-level approach to the study of organizational change can be applied in order to understand why this objective of more corporate focus was not achieved. Figure I illustrates the processes and levels:

Figure I: *Bauplan* processes, contexts and levels of analysis



Legend: Figure I depicts the links between levels and change processes

At the time of Phase II of the *Bauplan* change (the creation of the position of Head of general Medicines) the pharmaceutical industry in Canada was under great pressure because another company's bestselling drug (*Vioxx*) had been found to be unsafe and had been taken off the market. This led to the government's creating more regulations and being even stricter. At the same time, the business environment became more difficult.

These two factors increased the pressure on the company and its employees. Corporate headquarters still expected its Canadian subsidiary to make its numbers, but the worsening economic environment meant that there was a lack of resources – it was not easy to hire replacements for people who left, for example. The effect of this was seen at the group level; the Business Franchises became more silo-like. The managers in each of the franchises were under pressure to meet their targets, so felt that they had less time to co-operate with their colleagues in the other Business Franchises. At the same time, life became more difficult for the support functions, especially Regulatory – they had to meet the demands of the Business Franchises, all the while having to deal with expanded requirements from the government

because of the drug scandal. They support functions also had to deal with the fact that it was difficult to get additional resources.

Conclusions

The multilevel model of change that emerges from this research resembles what Rousseau [11: 84] calls a cross-level theory: “cross-level theories specify causal models of the effects phenomena at one level have on those at another”. Three levels of analysis were identified during our research and we observed how changes at one level affected other levels, beginning with the outer context, where we saw how the business environment was influential in shaping the change processes within PCo.

Consequently, managers should be aware of how complex change is and that there are always unanticipated consequences; they tend to underestimate the effect organizational change has on the individual. It was noticed several times during the research that senior managers did not appreciate that decisions they were making could have an indirect impact on others. A classic example of this at PCo Canada was when the senior managers assumed that *Bauplan* Phase 2 change would only affect the VPs who were directly involved (i.e. who had to report to the Head of General Medicines). The thought process was: “This change is affecting A, because she is going to report to me. No one else is affected because they report to A, so nothing changes for them.” In order to avoid such misunderstandings, we suggest that managers take account of the multilevel nature of change processes. In doing so, their thought process might be: “This change is affecting A, because she is going to report to me. What is she going to do differently because of that? And how will what she does differently affect the people who report to her? And how will that affect her group?” In essence, our recommendation is that managers analyse what the “spin-off” effects of the change will be, or, in other words, consider the secondary impacts of a change on all levels within the organization. Only if they do this can they properly implement change management tool and methods.

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